

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A computer-implemented method of processing a document, said method comprising:

converting a document into a common format document;

recognizing [[a]]two or more concepts in said common format document, wherein said two or more concepts each represent a basic idea expressed in said common format document;

recognizing a concept association for the two or more recognized concepts associated with a conceptual model that includes the concept association for the two or more recognized concepts;

indicating a concept type associated with said document using the conceptual model, wherein the concept type comprises a group of one or more concepts that represent a similar idea;

~~using a conceptual taxonomy specifying at least one relationship between two or more concepts to associate a concept type identification with said concept;~~

~~incorporating said concept in a conceptual model at least in part by using said concept type identification, wherein the conceptual model is not included in the conceptual taxonomy;~~

receiving a search query associated with said concept type identification; and

~~identifying said concept at least in part by using said concept type identification of said search query;~~

~~using said conceptual model to determine that said document is associated with said identified concept; and~~

identifying concluding, based at least in part on the association of the concept type with determination that said document is associated with said identified concept, that said document is responsive to said search query.

2. (Currently Amended) The computer-implemented method of claim 1, wherein recognizing said two or more concepts includes for each of said two or more concepts:

identifying a plurality of features in said common format document, wherein said plurality of features represents evidence of one of said two or more concepts in said common format document.

3. (Currently Amended) The computer-implemented method of claim 2, wherein recognizing said two or more concepts further includes for each of said two or more concepts:

calculating a concept weight for one of said two or more concepts using a plurality of feature weights associated with said plurality of features, wherein said concept weight represents a recognition confidence level for one of said two or more concepts; and

comparing said concept weight with a predetermined threshold value.

4. (Currently Amended) The computer-implemented method of claim 1, further comprising:

~~by referencing~~ based on said conceptual model, generating an auto-attribute, said auto-attribute being a descriptive label for said common format document.

5. (Currently Amended) The computer-implemented method of claim 1, further comprising:

~~by referencing~~ based on said conceptual model, assigning said common format document to a subject category.

6. (Original) The computer-implemented method of claim 1, wherein said converting includes converting said document into a common format document that is in an XML format.

7. (Currently Amended) A computer-readable medium to direct a computer to function in a specified manner, comprising instructions for:

converting a document into a common format document;

recognizing two or more concepts in said common format document, wherein said two or more concepts each represent a basic idea expressed in said common format document;

recognizing a concept association for the two or more recognized concepts associated with a conceptual model that includes the concept association for the two or more recognized concepts;

indicating a concept type associated with said document using the conceptual model, wherein the concept type comprises a group of one or more concepts that represent a similar idea;

receiving a search query associated with said concept type; and
identifying, based at least in part on the association of the concept type with said
document, that said document is responsive to said search query.

~~instructions to recognize a basic idea expressed in a document;~~
~~instructions to assign a concept identification to said basic idea;~~
~~instructions to associate a concept type identification with said concept identification~~
~~using a conceptual taxonomy specifying at least one relationship between two or more concepts;~~
~~instructions to generate a conceptual model based upon said concept identification at least~~
~~in part by using said concept type identification, wherein the conceptual model is not included in~~
~~the conceptual taxonomy;~~
~~instructions to receive a search query associated with said concept type identification;~~
~~instructions to identify said concept identification at least in part by using said concept~~
~~type identification of said search query;~~
~~instructions to use said conceptual model to determine that said document is associated~~
~~with said identified concept identification; and~~
~~instructions to conclude, based at least in part on the determination that said document is~~
~~associated with said identified concept identification, that said document is responsive to said~~
~~search query.~~

8. (Currently Amended) The computer-implemented method of claim 1, wherein the conceptual
model includes a concept dictionary. The computer-readable medium of claim 7, wherein said
instructions to recognize said basic idea include:

~~instructions to determine whether a plurality of features is present in said~~
~~document, wherein said plurality of features represents evidence that said basic idea is expressed~~
~~in said document.~~

9. (Currently Amended) ~~The computer-readable medium of claim 8, wherein said instructions to~~
The computer-implemented method of claim 1, wherein recognize[[e]]ing said two or more
concepts basic idea further includes for each of said two or more concepts:

~~instructions to calculate~~ing a recognition confidence level for one of said basic idea
two or more concepts using a plurality of feature weights associated with said plurality of
features; and

~~instructions to compare~~ing said recognition confidence level with a predetermined
threshold value.

10. (Currently Amended) ~~The computer-readable medium of claim 9, wherein said instructions~~
~~to~~ The computer-implemented method of claim 9, further comprising incorporating said two or
more concepts into generate said conceptual model in the event that the recognition confidence
level exceeds the predetermined threshold value. include:

~~instructions to incorporate said recognition confidence level in said conceptual~~
~~model.~~

11. (Currently Amended) The computer-implemented method of claim 1, wherein the conceptual
model includes a noise dictionary. ~~The computer-readable medium of claim 7, further~~
~~comprising:~~

~~instructions to assign an auto-attribute to said document based upon said~~
~~conceptual model, wherein said auto-attribute represents a descriptive label for said document.~~

12. (Currently Amended) ~~The computer-readable medium of claim 7~~ The computer-implemented
method of claim 1, further comprising:

~~instructions to place said document in~~ assigning a subject category to said document of a
categorization taxonomy based at least in part upon said conceptual model, wherein said
categorization taxonomy includes a plurality of categories.

13. (Currently Amended) ~~The computer-readable medium of claim 12~~ The computer-
implemented method of claim 12, wherein assigning the subject category follows an auto-
categorization rule. said instructions to place said document in said category include:

~~instructions to assign an auto-category to said document, wherein said auto-category~~
~~represents a descriptive label for said category.~~

14. (Currently Amended) A computer, comprising:

a processor; and

a memory connected to said processor, wherein said memory includes:

a document modeling module, said document modeling module having:

a first module configured to direct said processor to recognize [[a]] two or

more

concepts in a document, wherein each of said two or more concepts represents a basic idea expressed in said document; and

a second module configured to recognize a concept association for the two or more recognized concepts associated with a conceptual model that includes the concept association for the two or more recognized concepts; and

a third module configured to indicate a concept type associated with said document using the conceptual model, wherein the concept type comprises a group of one or more concepts that represent a similar idea; and use a conceptual taxonomy specifying at least one relationship between two or more concepts to associate a concept type identification with said concept, and direct said processor to generate a conceptual model based upon said concept at least in part by using said concept type identification, wherein the conceptual model is not included in the conceptual taxonomy;

an interface configured to receive a search query, wherein when [[a]] said search query is associated with said concept type identification is received, said document is identified as being responsive to said search query based at least in part on the association of the concept type with said document. ~~said concept is identified at least in part by using said concept type identification of said search query, said conceptual model is used to determine that said document is associated with said identified concept, and the determination that said document is associated with said identified concept is used at least in part to conclude that said document is responsive to said search query.~~

15. (Currently Amended) The computer of claim 14, wherein said memory further includes:

a document integration module, said document integration module having:

a ~~third~~ twelfth module configured to direct said processor to convert said document to a common format.

16. (Previously Presented) The computer of claim 15, wherein said document integration module further has:

a fourth module configured to direct said processor to separate a text portion from said document; and

a fifth module configured to direct said processor to incorporate said text portion in said document in the common format.

17. (Currently Amended) The computer of claim 14, wherein said first module has:

a sixth module configured to direct said processor to determine whether a plurality of features is present in said document, wherein said plurality of features represents evidence of one of said two or more concepts in said document;

a seventh module configured to direct said processor to calculate a concept weight for one of said two or more concepts using a plurality of feature weights associated with said plurality of features, wherein said concept weight represents a recognition confidence level for one of said two or more concepts; and

an eighth module configured to direct said processor to compare said concept weight with a predetermined threshold value.

18. (Original) The computer of claim 14, wherein said memory further includes:

a modeling directory,

and wherein said document modeling module further has:

a ninth module configured to direct said processor to store said conceptual model in said modeling directory.

19. (Original) The computer of claim 14, wherein said document modeling module further has:

a tenth module configured to direct said processor to generate an auto-attribute based upon said conceptual model, wherein said auto-attribute represents a descriptive label for said document.

20. (Original) The computer of claim 14, wherein said document modeling module further has:

an eleventh module configured to direct said processor to categorize said document in a category of a plurality of categories based upon said conceptual model.

21. (New) The computer-implemented method of claim 1, wherein the conceptual model includes a concept association dictionary.